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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/599,533	12/18/2006	Paul Ikin	169-46.1	1447
22913	7590	09/15/2009		
Workman Nydegger 1000 Eagle Gate Tower 60 East South Temple Salt Lake City, UT 84111			EXAMINER BROWN, COURTNEY A	
			ART UNIT	PAPER NUMBER
			1616	
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			09/15/2009	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/599,533

**Applicant(s)**

IKIN, PAUL

**Examiner**

COURTNEY BROWN

**Art Unit**

1616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1, 7, 16, 20, 21, 23, 28, 32, 35, 36, 40, 46, 50, 53, 54, 56, 59, 61, 65 and 66 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 7, 16, 20, 21, 23, 28, 32, 35, 36, 40, 46, 50, 53, 54, 56, 59, 61, 65 and 66 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-846)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 10/11/06.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_.

## **DETAILED ACTION**

### ***Status of Claims***

Claims 1,7,16,20,21,23,28,32,35,36,40,46,50,53,54,56,59,61,65 and 66 are pending and are being examined for patentability.

### ***Priority***

This application is a 371 of PCT/AU2005/000460 filed March 30, 2005 and claims benefit to Australian Application 2004901702 filed March 30, 2004.

### ***Information Disclosure Statement***

The Information Disclosure Statements (IDS) submitted on October 11, 2006 has been considered by the examiner.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

**Claims 1,7,16,20,21,23,28,32,35,36,40,46,50,53,54,56,59,61,65 and 66 are rejected under 35 U.S.C. 103(a) as being unpatentable over Toyone (US Patent 5,458,662) in view of Straumietis (US 20060168881 A1) and Yanagida Tomotaka (JP10056876A).**

***Applicant's Invention***

Applicant claims a growth medium including (a) fine grade coir and (b) coir having a particle size of at least 3mm, wherein the fine grade coir is 40% or less of the total amount of coir in the medium, and wherein the amount of coir having a particle size of at least 3mm is 60% or more of the total amount of coir in the medium.

***Determination of the scope and the content of the prior art  
(MPEP 2141.01)***

Toyone teaches that processed coconut outer husk chops, including coconut outer husk chops produced by compressing coconut outer husk are suitable for a planting material, an inert medium for hydroponics and a microorganism propagating bed (abstract). Said processed coconut outer husk chops are produced by performing at least one cycle of the compression, water soaking, dehydration, drying and chopping of **elongate coconut outer husk pieces which may comprise powder and coirs derived from the coconut outer husk chops**. Toyone teaches that the coirs outside coconut outer husk chops serve as pipes for draining excessive water through the bottom of the planting vessel. The instant specification discloses that the long fibers of coir are extracted from the coconut husk and that short fibers equals 2mm or less and that the dust component equals 0-2mm. Instant claim 20 discloses the coir component

having a particle size of at least 3 mm and is a mixture of 3-6 mm. Thus, the Examiner interprets the chip and fibre coir of the instant application to be equivalent to the coir component as taught by Toyone; the fine grade coir of the instant application to be equivalent to the dust component as taught by Toyone and the coir component of the instant application to be equivalent to the coconut outer husk chop as taught by Toyone. Toyone teaches that each of the processed coconut outer husk chops has the form of a grain with a major diameter of a suitable length, e.g., **5 mm** or more, preferably **5-10 mm** (coir component of instant application). Toyone teaches that each of the coirs have a length of **0.3-5 cm (3-50mm)** (chip and fibre component of instant application), preferably, **0.5-3 cm (5-30 mm)**. The composition ratio of coconut outer husk **chop:coir:powder** (i.e., coir: chip and fibre coir: fine grade coir of instant application) is **30-92:4-40:3-20**, preferably, **40-88:6-20:6-20** (column 7, lines 13-25). Toyone teaches that each processed coconut outer husk chop is sufficiently porous, and has a shape holding power and good drainage. Toyone teaches that since the coconut outer husk chops absorb excessive water, said processed coconut outer husk chops drain well and have a large amount of both water holding power and fertilizer holding power. The processed coconut outer husk chops may be used alone in the planting vessel or the flowerpot (column 5, lines 10-24). However, Toyone teaches that the processed coconut outer husk chops comprising certain quantities of the powder and coirs derived from the coconut outer husk chops are better as the planting material than the processed coconut outer husk chops without said powder and coirs derived from the coconut outer husk chops. (column 6, line 64 bridging to column 7, lines 1-12). Toyone

teaches that the coirs outside coconut outer husk chops serve as pipes for draining excessive water through the bottom of the planting vessel and that the powder distributes excessive water uniformly throughout the planting material in the planting vessel(column 5, lines 10-24).

***Ascertainment of the difference between the prior art and the claims  
(MPEP 2141.02)***

The difference between the invention of the instant application and that of Toyone is that Toyone does not expressly teach the use of calcium and magnesium. This deficiency in Toyone is cured by the teachings of Straumietis. Straumietis teaches the use of vermicompost (earthworm castings) which is an organic source of nitrogen, phosphorus, potassium, **calcium, magnesium** and micronutrients in an organic form that is easily absorbed by plants ([0111] ) in a hydroponics nutrient feeding kit for culturing plants indoors, outdoors and in green houses, that can be used with coir and other hydroponic growth mediums and systems (abstract).

The difference between the invention of the instant application and that of Toyone is that Toyone does not expressly teach the use of a gross medium comprising the claimed coir components in the form of a compressed block. This deficiency in Toyone is cured by the teachings of Yanagida Tomotaka. Yanagida Tomotaka teaches a tabular base material for growing plants obtained by mixing 10wt.% of coir to a combination of 30-40wt.% of a dust of coconut palm and 60-50wt.% of coconut pericarp bits, and **compression molding** (abstract).

***Finding of prima facie obviousness***

***Rationale and Motivation (MPEP 2142-2143)***

It would have been obvious to one of ordinary skill in the art at the time of invention to combine the teachings of Toyone and Straumietis and use nutrients such as magnesium and calcium in a growth medium including (a) fine grade coir ,(b) coir and (c) chip and fibre coir. Straumietis teaches that out of the 60 atomic elements found in plants, it is believed that only 16 of these elements, including magnesium and calcium, are needed for plants to sustain life, which the plant uses in larger amounts ([005] of Straumietis). One skilled in the art at the time the invention was made would have been motivated to use magnesium and calcium in a growth medium with the expectation of successfully providing: a medium for plants that has water holding and fertilizer holding power due to the presence of the coir component (outer husk chop component of Toyone);a means for draining excessive water through the bottom of the planting vessel due to the presence of the chip and fibre coir component (coir component of Toyone); a means to distribute excessive water uniformly throughout the planting material in the planting vessel due to the fine coir component (powder component of Toyone, column 5, lines 10-24) as well as essential elements such as calcium and magnesium for the plant's survival.



It would have been obvious to one skilled in the art at the time the invention was made to use the teachings of Toyone and Yanagida Tomotaka and use the instant growth medium in the form of a compressed block. The skilled artisan would have been motivated to use the instant growth medium in the form of a compressed base material for growing plants with the expectation of producing: a growth medium that has excellent in water retainability by the action of coconut palm dust; is free from deformation by upward pressure; has excellent flexural strength because the coir interlace each other and is capable of applying to the greening of a rooftop, etc., of a building (abstract of Yanagida Tomotaka).

With regard to instant claims 65 and 66 wherein "the medium has been compressed by a factor of at least 3 or at least 5 when compared to the uncompressed volume" this is merely judicious selection of an enclosed volume by one of ordinary skill in the art in the absence of evidence to the contrary.

All the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions, and the combination would have yielded predictable results to one of ordinary skill in the art at the time of the invention.

Therefore, the claimed invention as a whole would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made because every element of the invention has been fairly suggested by the cited references.

### ***Conclusion***

None of the claims are allowed.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR Only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electron Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Courtney Brown, whose telephone number is 571-270-3284. The examiner can normally be reached on Monday-Friday from 8 am to 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

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Supervisor, Johann Richter can be reached on 571-272-0646. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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